5706

QUAD 2-INPUT PERIPHERAL/POWER DRIVER —TRANSIENT-PROTECTED OUTPUTS





RECOMMENDED OPERATING CONDITIONS

	Min.	Nom.	Max.	Units	
Supply Voltage (V _{CC})	4. 75	5.0	5.25	V	
Operating Temperature Range	-40	+25	+85	°C	
Current into any output (ON state)	—	—	300	mA	



INPUT TEST PULSE CHARACTERISTICS

$V_{IN(0)} = 0 V$	t _f = 7 ns	t _p = 1μs
V _{IN(1)} = 3.5 V	t _r = 14 ns	PRR = 500 kHz



115 Northeast Cutoff, Box 15036 Worcester, Massachusetts 01615-0036 (508) 853-5000 Copyright o 1995, 1996 Allegro MicroSystems, Inc.

ELECTRICAL CHARACTERISTICS over operating temperature range (unless otherwise noted).

		Test Conditions				Limits					
Characteristic	Symbol	Temp.	V _{cc}	Driven Input	Other Input	Output	Min.	Тур.	Max.	Units	Notes
"1" Output Reverse Current	I _{OFF}	—	MIN	2.0 V	2.0 V	80 V	_	_	100	μA	—
			OPEN	2.0 V	2.0 V	80 V	_	_	100	μA	—
"0" Output Voltage	V _{ON}	—	MIN	0.8 V	V _{CC}	150 mA	—	0.35	0.5	V	—
			MIN	0.8 V	V _{CC}	300 mA	—	0.5	0.7	V	—
"1" Input Voltage	V _{IN(1)}	—	MIN	—	—	—	2.0	_	_	V	—
"0" Input Voltage	V _{IN(0)}	—	MIN	—		—	—	_	0.8	V	—
"0" Input Current	I _{IN(0)}	—	MAX	0.4 V	30 V	—	—	-50	-100	μΑ	2
"1" Input Current	I _{IN(1)}	—	MAX	30 V	0 V	—	—	_	10	μΑ	2
Input Clamp Voltage	V _{LK}	—	MIN	-12 mA		—	—	—	-1.5	V	—
Diode Leakage Current	I _R	NOM	NOM	0 V	0 V	OPEN	—	_	200	μA	3
Diode Forward Voltage Drop	V _F	NOM	NOM	V _{cc}	V _{CC}	—	—	1.5	1.75	V	4
"1" Level Supply Current	I _{CC(1)}	NOM	MAX	5.0 V	5.0 V	—	—	16	24	mA	5
"0" Level Supply Current	I _{CC(0)}	NOM	MAX	0 V	0 V	—	—	70	98	mA	5

SWITCHING CHARACTERISTICS at V_{CC} = 5.0 V, T_A = 25°C

			Limits				
Characteristic	Symbol	Test Conditions	Min.	Тур.	Max.	Units	Notes
Turn-on Delay Time	t _{pd0}	V_{S} = 70 V, R_{L} = 465 Ω (10 Watts),	—	200	_	ns	
		$C_L = 15 \text{ pF}$ (including probe and test fixture)					
Turn-off Delay Time	t _{pd1}	V_{S} = 70 V, R_{L} = 465 Ω (10 Watts),	—	300	_	ns	
		$C_L = 15 pF$ (including probe and test fixture)					

NOTES: 1. Typical values are at $V_{CC} = 5.0 \text{ V}$, $T_A = 25^{\circ}\text{C}$. 2. Each input tested separately. 3. Diode leakage current measured at $V_R = V_{off (min)}$. 4. Diode forward voltage drop measured at $I_F = 300 \text{ mA}$.

5. Per package.

5706 *QUAD PERIPHERAL/POWER DRIVER*



- NOTES: 1. Lead thickness is measured at seating plane or below.
 - Lead spacing tolerance is non-cumulative.
 - 3. Exact body and lead configuration at
 - vendor's option within limits shown.

Allegro MicroSystems, Inc. reserves the right to make, from time to time, such departures from the detail specifications as may be required to permit improvements in the design of its products. Components made under military approvals will be in accordance with the approval requirements.

The information included herein is believed to be accurate and reliable. However, Allegro MicroSystems, Inc. assumes no responsibility for its use; nor for any infringements of patents or other rights of third parties which may result from its use.



115 Northeast Cutoff, Box 15036 Worcester, Massachusetts 01615-0036 (508) 853-5000